

Amendments to the Claims

1. (currently amended) A method of treating hypertension, acute myocardial infarction, cardiac arrhythmias or side effects of situational anxiety in a patient comprising administering a therapeutic amount of ~~atenolol, pindolol, esmolol, propranolol, or metoprolol~~ a drug condensation aerosol to the patient by inhalation,

wherein the drug is selected from the group consisting of atenolol, pindolol, esmolol, propranolol and metoprolol, and

wherein the condensation aerosol is formed by heating a thin layer containing the drug, on a solid support, to produce a vapor of the drug, and condensing the vapor to form a condensation aerosol characterized by less than 10% drug degradation products by weight, and having an MMAD of less than 3 μ m and less than 5% atenolol, pindolol, esmolol, propranolol, or metoprolol degradation products, to a patient by inhalation, upon activation by the patient of the formation of, and delivery of, the condensation aerosol 5 microns.

2. (currently amended) The method of according to claim 1, wherein the condensation aerosol is characterized by an MMAD of less than 3 microns wherein said condensation aerosol is formed by

- a. volatilizing atenolol, pindolol, esmolol, propranolol, or metoprolol under conditions effective to produce a heated vapor of the atenolol, pindolol, esmolol, propranolol, or metoprolol and
- b. condensing the heated vapor of the atenolol, pindolol, esmolol, propranolol, or metoprolol to form condensation aerosol particles.

3. (original) The method according to claim 1, wherein the condensation aerosol is formed at a rate greater than 0.5 mg/second.

4. (currently amended) The method according to claim + 28, wherein said the therapeutic amount of atenolol condensation aerosol comprises between 0.1 mg and 20 mg of atenolol delivered in a single inspiration.

5. (currently amended) The method according to claim + 29, wherein said the therapeutic amount of pindolol condensation aerosol comprises between 0.1 mg and 20 mg of pindolol delivered in a single inspiration.

6. (currently amended) The method according to claim + 30, wherein said the therapeutic amount of esmolol condensation aerosol comprises between 4 mg and 100 mg of esmolol delivered in a single inspiration.

7. (currently amended) The method according to claim + 31, wherein said the therapeutic amount of propranolol condensation aerosol comprises between 0.2 mg and 050 50 mg of propranolol delivered in a single inspiration.

8. (currently amended) The method according to claim + 32, wherein said the therapeutic amount of metoprolol condensation aerosol comprises between 1 mg and 30 mg of metoprolol delivered in a single inspiration.

9. (currently amended) The method according to claim 2 1, wherein said administration results in a peak plasma drug concentration of said atenolol, pindolol, esmolol, propranolol, or metoprolol is reached in less than 0.1 hours.

10. (original) The method according to claim 1, wherein at least 50% by weight of the condensation aerosol is amorphous in form.

11. (currently amended) A method of administering atenolol, pindolol, esmolol, propranolol, or metoprolol a drug condensation aerosol to a patient to achieve a peak plasma drug concentration rapidly, comprising administering to the patient by inhalation an aerosol of atenolol, pindolol, esmolol, propranolol, or metoprolol having less than 5% atenolol, pindolol, esmolol, propranolol, or metoprolol by inhalation,

wherein the drug is selected from the group consisting of atenolol, pindolol, esmolol, propranolol and metoprolol, and

wherein the drug condensation aerosol is formed by heating a thin layer containing the drug, on a solid support, to produce a vapor of the drug, and condensing the vapor to form a condensation aerosol characterized by less than 10% drug degradation products by weight, and an MMAD of less than 3-microns 5 microns, and

wherein the peak plasma drug concentration is ~~achieved~~ reached in less than 0.1 hours.

12. (currently amended) A kit for delivering a drug condensation aerosol comprising:

~~a) a thin coating of an atenolol, pindolol, esmolol, propranolol, or metoprolol composition, and layer containing the drug, on a solid support, wherein the drug is selected from the group consisting of atenolol, pindolol, esmolol, propranolol and metoprolol, and~~

~~b) b. a device for dispensing said thin coating as a condensation aerosol providing the condensation aerosol, wherein the condensation aerosol is formed by heating the thin layer to produce a vapor of the drug, and condensing the vapor to form a condensation aerosol characterized by less than 10% drug degradation products by weight, and an MMAD of less than 5 microns.~~

13. (currently amended) The kit of according to claim 12, wherein ~~said coating~~ the thin layer has a thickness between ~~5.2-6.5 microns~~ 5.2 and 6.5 microns.

14. (currently amended) The kit of according to claim 12, wherein the device for dispensing ~~said coating as a condensation aerosol~~ comprises:

~~(a) a flow through enclosure containing the solid support,~~

~~(b) — contained within the enclosure, a metal substrate with a foil-like surface and having a thin coating of atenolol, pindolol, esmolol, propranolol, or metoprolol composition formed on the substrate surface,~~

~~(a) b. a power source that can be activated to heat the substrate to a temperature effective to volatilize the atenolol, pindolol, esmolol, propranolol, or metoprolol composition contained in said coating solid support, and~~

~~(a) c. inlet and exit portals at least one portal through which air can be drawn through said device by inhalation,~~

~~wherein heating the substrate by activation of the power source is effective to form an atenolol, pindolol, esmolol, propranolol, or metoprolol vapor containing less than 5 atenolol, pindolol, esmolol, propranolol, or metoprolol degradation products, and drawing air through said chamber is effective to~~

~~condense the atenolol, pindolol, esmolol, propranolol, or metoprolol vapor to form aerosol particles wherein the aerosol has an MMAD of less than 3 microns produce a vapor of the drug, and drawing air through the enclosure is effective to condense the vapor to form the condensation aerosol.~~

15. (currently amended) The kit according to claim 14, wherein the heat for heating the substrate solid support is generated by an exothermic chemical reaction.

16. (currently amended) The kit according to claim 15, wherein said the exothermic chemical reaction is oxidation of combustible materials.

17. (currently amended) The kit according to claim 14, wherein the heat for heating the substrate solid support is generated by passage of current through an electrical resistance element.

18. (currently amended) The kit according to claim 14, wherein said substrate the solid support has a surface area dimensioned to accommodate a therapeutic dose of ~~atenolol, pindolol, esmolol, propranolol, or metoprolol~~ composition in said coating the drug.

19. (currently amended) The kit according to claim 12, ~~wherein a peak wherein peak plasma drug concentration of atenolol, pindolol, esmolol, propranolol, or metoprolol is obtained is reached in less than 0.1 hours after delivery of condensation aerosol to the pulmonary system.~~

20. (currently amended) The kit of according to claim 11 12, further including instructions for use.

21. (new) The method according to claim 1, wherein the condensation aerosol is characterized by an MMAD of 0.2 to 5 microns.

22. (new) The method according to claim 2, wherein the condensation aerosol is characterized by an MMAD of 0.2 to 3 microns.

23. (new) The method according to claim 1, wherein the condensation aerosol comprises at least 80% drug by weight.

24. (new) The method according to claim 23, wherein the condensation aerosol comprises at least 95% drug by weight.

25. (new) The method according to claim 1, wherein the thin layer comprises at least 80% drug by weight.

26. (new) The method according to claim 25, wherein the thin layer comprises at least 95% drug by weight.

27. (new) The method according to claim 1, wherein the thin layer has a thickness between 5.2 and 6.5 microns.

28. (new) The method according to claim 1, wherein the drug is atenolol.

29. (new) The method according to claim 1, wherein the drug is pindolol.

30. (new) The method according to claim 1, wherein the drug is esmolol.

31. (new) The method according to claim 1, wherein the drug is propranolol.

32. (new) The method according to claim 1, wherein the drug is metoprolol.

33. (new) The kit according to claim 12, wherein the condensation aerosol is characterized by an MMAD of less than 3 microns.

34. (new) The kit according to claim 12, wherein the condensation aerosol is characterized by an MMAD of 0.2 to 5 microns.

35. (new) The kit according to claim 33, wherein the condensation aerosol is characterized by an MMAD of 0.2 to 3 microns.

36. (new) The kit according to claim 12, wherein the condensation aerosol comprises at least 80% drug by weight.

37. (new) The kit according to claim 36, wherein the condensation aerosol comprises at least 95% drug by weight.

38. (new) The kit according to claim 12, wherein the thin layer comprises at least 80% drug by weight.

39. (new) The kit according to claim 38, wherein the thin layer comprises at least 95% drug by weight.

40. (new) The kit according to claim 12, wherein the drug is atenolol.

41. (new) The kit according to claim 12, wherein the drug is pindolol.

42. (new) The kit according to claim 12, wherein the drug is esmolol.

43. (new) The kit according to claim 12, wherein the drug is propranolol.

44. (new) The kit according to claim 12, wherein the drug is metoprolol.

45. (new) The kit according to claim 14, wherein the solid support has a surface to mass ratio of greater than 1 cm² per gram.

46. (new) The kit according to claim 14, wherein the solid support has a surface to volume ratio of greater than 100 per meter.

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47. (new) The kit according to claim 14, wherein the solid support is a metal foil.

48. (new) The kit according to claim 47, wherein the metal foil has a thickness of less than 0.25 mm.